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**Full-time Commercial Motor Vehicle Inspection Units within a Police
Department**

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**An Administrative Research Paper
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ABSTRACT

The number one complaint Dallas-Fort Worth area police departments hear from citizens revolves around traffic enforcement. Tax payers want more traffic enforcement to curb speeding, red light running and debris in the streets. This paper will examine how police departments can address citizen concerns by forming a commercial motor vehicle inspection unit. Current motor vehicle inspection practitioners will be interviewed along with regional government policy makers. Increasing commercial truck traffic, combined with truck safety deficiencies will point to the need for establishing a commercial motor vehicle inspection unit. Truck inspectors can be cost effective and well received by the public.

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INTRODUCTION

North Texas police departments are always looking for ways to be responsive to its citizens needs. Uniform Crime Report statistics usually make for more headlines than accident statistics. Banks that are robbed and people that are murdered are good for morning headlines. Television news camera footage of shooting victims increase the ratings for television stations. Traffic violations are not normally in the newspapers or on television unless something horrific has happened.

According to Police Chief Theron Bowman, "traffic issues are consistently listed as a major issue by Arlington residents" (2003). Three major highways border the City of Arlington, SH 360 on the east, IH 30 on the north and IH 20 on the south. The Texas Department of Transportation estimates that almost 500,000 vehicles pass through Arlington on these highways, in a 24 hour period (Michael Peters, personal communication, August 12, 2004). The City of Arlington is growing along with the Dallas-Fort Worth Metroplex. It seems the entire D/FW area drives through Arlington on busy days. Arlington is representative of all major cities in North Texas. Municipalities have increasing populations and demands on public services.

In 2003, nine people were murdered and 18 died in motor vehicle accidents in the City of Arlington. Additionally, Arlington has always had more traffic deaths than murders. The Police Department recognizes the need for traffic enforcement with its deploying over 20 Motorcycle Officers and three Traffic Enforcement Officers (TEOs). The TEOs are specifically assigned to the three major highways in Arlington. Arlington also has eight accident investigators that conduct traffic enforcement but are primarily assigned to fatality accidents. Four of the accident investigators are certified by the

Federal Motor Carrier Safety Administration in North American Roadside inspections. Accident Investigators do the commercial motor vehicle inspections on a part time basis using 25% of their time, (Corporeal Whittington, personal communication, August 12, 2004).

The question to be examined by this research paper considers whether or not North Texas municipalities should assign police personnel to inspect commercial motor vehicles (CMVs) on a full time basis. This question will be explored by reviewing all of the relevant literature and by interviewing City of Arlington Police Officers, Texas Department of Transportation officials, and North Texas Council of Government officials. The City of Arlington will be used as an example being representative of mid-sized North Texas cities with increasing commercial motor vehicle traffic. Presently the City of Arlington is expecting a 17 million dollar deficit for the fiscal year 2005. Despite the financial hurdles, the expected results should determine that the Arlington Police Department can effectively use a full time Commercial Motor Vehicle (CMV) Unit. The unit can be cost effective for comparable cities, while impacting safety violations committed by the trucking industry.

The field of law enforcement will benefit from this research by universally recognizing the importance of inspecting commercial motor vehicles and enforcing all of the relevant laws associated with CMVs. Owners and operators of CMVs will be made aware that they are to be held accountable within the City of Arlington for how and what they drive. Truck drivers will be forced to drive with their loads secured or risk heavy fines imposed by any city enforcing the relevant commercial motor vehicle laws.

An interesting possible outcome of full time CMV enforcement could be both patrol and other traffic units getting involved. CMV inspectors are unique in their enforcement capability yet other road units are capable of enforcing many safety violations, under the Texas Transportation Code, if they recognize the violations. The combined enforcement capabilities of patrol, traffic and CMV inspectors could assist substantially in making the streets of North Texas cities safer.

REVIEW OF LITERATURE

Commercial motor vehicles are currently in the public spotlight for many reasons. It is important to understand what a commercial motor vehicle (CMV) is (Fleet Owner 2001.) Any vehicle with a gross vehicle weight rating (GVWR) or gross vehicle rating (GVR) of 10001 pounds or more is defined as a commercial motor vehicle. This definition would include vehicles weighing less than 10001 pounds but carry enough weight to put it over the 10001 minimum (FMCSA 2005.)

Commercial motor vehicles are inspected on four different government levels using the North American Roadside Inspection Standards (DOT 2005.) The Federal Department of Transportation inspects at fixed border stations. The State of Texas inspects at weigh stations and at roadside sites. Municipalities inspect on the side of their streets (Bulk Transporter 2002.)

The North American Free Trade Agreement (NAFTA) has increased truck traffic from other than U.S. Sources on American streets and highways. The Federal Motor Carrier Safety Administration (FMCSA) has estimated that 4.5 million border crossings occurred at the U.S.-Mexico border in 1999 (FMCSA, 2002.) 97000 of these trucks

were inspected (Bulk Transporter 2001.) The trucks inspected at the border failed inspections at a 25 percent rate. The failures involved brakes, lights, tires and load securing issues. (Fleet Owner 2001) Out of service (OOS) rates have dropped with increased inspections. The FMCSA does annual inspections and has noted the drop in the out of service rate from 24 percent in 2000 to 22.6 percent in 2005. (Fleet Owner 2005)

The volume of traffic on Dallas-Fort Worth roads has increased with the increasing population.(NTCOG 2005) The number of trucks going through the City of Arlington was noted to average 26,00 trucks a day. (NTCOG 2005) Coupling the increased traffic with the number one citizen complaint about traffic violations, the City Of Arlington Traffic Unit has a Commercial Truck Inspection Team along with accident investigators and motorcycle officers. (City of Arlington 2004) The City of Arlington Traffic Unit has provided input as to its out of service failure rate and the reasons for these failures. The job of inspecting commercial motor vehicles falls on municipalities within the confines of their respective cities.

METHODOLOGY

Should a municipal police department implement a full-time commercial motor vehicle inspection unit? The answer would seem obvious yet inquiring to the Fort Worth, Dallas, Grand Prairie and Arlington police departments produces 4 different answers. The hypothesis of this paper is that Dallas-Fort Worth cities, with over one hundred thousand people, would benefit in creating a full-time Commercial Motor Vehicle Inspection Unit.

The methodology, for the purpose of this paper, were interviews with current practitioners to find out the relevance of police officers enforcing commercial motor vehicle laws. They were asked for their findings about the types of violations truck drivers commit and the effects of these violations on the citizens of their city. An inquiry was made into their knowledge of the compliance of the commercial motor vehicle industry to federal safety standards. They were also asked whether there are alternatives to their enforcing the truck safety laws.

The federal government 's involvement in commercial motor vehicle enforcement was examined and compared to both the State of Texas's and Tarrant County's involvement in this enforcement. Regional government agencies were asked about the volume of traffic on Dallas-Fort Worth roadways. The question was asked as to whether truck and passenger traffic is increasing and what percentage of traffic is truck traffic.

The interviews of the police practitioners and interviews of regional government agency employees along with the review of documentation provided by the federal government was synthesized in anticipation of supporting the hypothesis hypothesis.

FINDINGS

The practitioners of commercial motor vehicle enforcement, in Arlington, are in favor of full time enforcement. The eight year record of 75 to 50 percent out-of-service rates for commercial vehicles is two to three times what FMCSA documents to be the Texas average. The Texas Department of Public Safety is the lead agency in training all interested municipal agencies in CMV inspection. The Department of Public Safety

maintains inspection and weigh stations at all major points of entry to Texas while also doing traditional highway patrol activities.

The practitioners of CMV inspections are important to the research process. To see the effects of unsafe trucks and realize the potential for disaster when unsafe trucks are using Arlington's roads puts the practitioners on the front line of the enforcement effort. Sergeant Jeff Pugh, supervisor of the Arlington Police Department Accident Investigation Unit is outspoken in his support of full-time CMV inspections. The threat of inspection makes some truck operators comply with current laws or avoid municipalities that inspect trucks entirely. The guarantee of inspection is thought by Sergeant Pugh to be an important tool. Sgt. Pugh estimates part time inspectors put 70-79 percent of all trucks inspected, in 1996, out-of- service. He believes the current out-of-service rate is around 50 percent. He attributes the out-of-service reduction to truckers knowing they could possibly be inspected and are more likely to be in compliance.

Interestingly, the Federal Motor Carrier Safety Administration statistics for out-of-service roadside inspections and traffic enforcement out of service results for Texas are almost half what the Arlington Police Department estimates their out of service rate is. Nationally, 203,000 roadside inspections were recorded in 2001 with 26.7% of the vehicles placed out-of-service for safety violations. The drivers of those inspections were put out of service 7% of the time. Traffic enforcement put 14.5% of the vehicles and 11.9% of the drivers out of service, in 9400 traffic stops. (see Table 1 below)

Texas compliance review statistics for 2001. (Federal Motor Carrier Administration.)

Texas	
Compliance Reviews - 2001	
Total:	860
Satisfactory:	53.6 %
Conditional:	15.2 %
Unsatisfactory:	12.4 %
Not Rated:	18.7 %
Roadside Inspections - 2001	
Total:	203,066
Driver OOS*:	8.7 %
Vehicle OOS*:	26.7 %
Traffic Enforcement - 2001	
Total:	9,422
Driver OOS*:	11.9 %
Vehicle OOS*:	14.5 %
*Driver OOS Rate is based on inspection levels 1,2,3	
*Vehicle OOS Rate is based on inspection levels 1,2,5.	
Data Source: FMCSA (MCMIS) Sep. 28, 2002 data snapshot	

Table1

Comparing the City of Arlington Police officer's interviews with the Federal Motor Carrier Administration's numbers demonstrates that Arlington's truck traffic fails its roadside inspections at twice the reported rate statewide. Further comparison of all of the interviews conducted, in combination with federal and state statistics, points to an increasing need for CMV inspections in Arlington. This may indicate other municipalities would have similar findings.

Corporal Dan Whittington is the senior accident investigator and the senior commercial motor vehicle inspector for the Arlington Police Department. Cpl. Whittington estimates he and three other part-time inspectors spend 25 percent of their time involved with inspections and estimates that the inspectors have generated \$80,000 in citation revenue in the first six months of the fiscal year of 2004. He feels it

can be easily demonstrated that the unit could be cost effective whether it has two or four full time inspectors. Cpl. Whittington also notes that two officers are needed to fully inspect a truck; while one officer is physically under the truck inspecting the brakes, it requires the other officer to stay with the driver to insure the safety of the officer conducting the inspection.

Corporal Whittington lists 8 reasons why municipalities need to inspect CMVs:

- 1) Safety violations put approximately 50% of trucks inspected by the Arlington Police Department out of service.
- 2) Unsecured loads are indirect complaint he receives from Arlington citizens.
 - a. Debris on the side of the road is generally there because it came off a pickup or a CMV. Two Arlington fatalities can be attributed to loads or parts of CMVs separating from their truck bodies. Both fatalities could have been prevented by proper maintenance or trucks with secure loads. Flatbed trucks are the most frequent violator of improperly secured loads.
- 3) Hazardous materials are carried on any city street and quite often are not properly placarded.
 - a. This can be a potentially deadly situation for first responders if they do not know what they are dealing with.
- 4) Homeland security issues are important in any municipality.
 - a. Certified North American Roadside inspectors have the authority to examine any CMV for proper paperwork, safety inspections and secure loads. This allows the inspectors to examine any trailer.
 - b. Inspecting trailers lead to proper securing of loads and is useful in drug interdiction, human smuggling detection, and possibly discovering terrorist activity.
- 5) Corporal Whittington and his peers changed their work hours to see if night time CMV enforcement would be fruitful.
 - a. They discovered the “vast majority” of “over the road” truckers were either not maintaining their log books or considerably past their federally mandated total driving hours without rest. This brought up the concern of driver fatigue.
 - i. CMV enforcement is rare at night as CMV Troopers and weigh stations are generally only active in daylight hours. Cpl. Whittington feels CMV violators have a low risk of detection by running at night.
- 6) Arlington is experiencing a deterioration of its streets.

- a. Overweight trucks share in the blame for this damage. As a result Whittington and his peers have recently started weighing CMVs.
- 7) Municipalities have specific truck routes that are marked per state law.
 - a. Cities have designated these routes to keep trucks out of residential neighborhoods and reduce wear on city streets. These signs are rarely followed by CMV drivers.
- 8) The Texas Department of Public Safety has 5 CMV Inspectors in Tarrant, Ellis and Johnson County.
 - a. Their emphasis is “over the road” CMVs, on the various interstates, in unincorporated areas. This leaves municipalities to enforce any CMV safety rules. Commercial motor vehicles can potentially run un-inspected in incorporated Tarrant County.

The North Texas Council of Government's Transportation Planner, Rachel Harshman, claims the latest traffic counts, for CMVs, on Interstates 20 and 30 approximate 26,000 trucks a day. Harshman says “truck traffic will double nationally, in the next 20 years.” (Rachel Harshman, personal communication, August 13, 2005) A graph provided by Harshman is shown in table 2 (page 10.) The graph shows the increase in truck traffic from 1996-2000, on North Central Texas highways. A slight decrease in commercial motor vehicle traffic is noted for 2001 and 2002. The decrease in truck traffic is blamed on a weak economy (Rachel Harshman, personal communication August 14, 2004).

North Texas Council of Government's Truck Tracking Table for July 19, 2004.

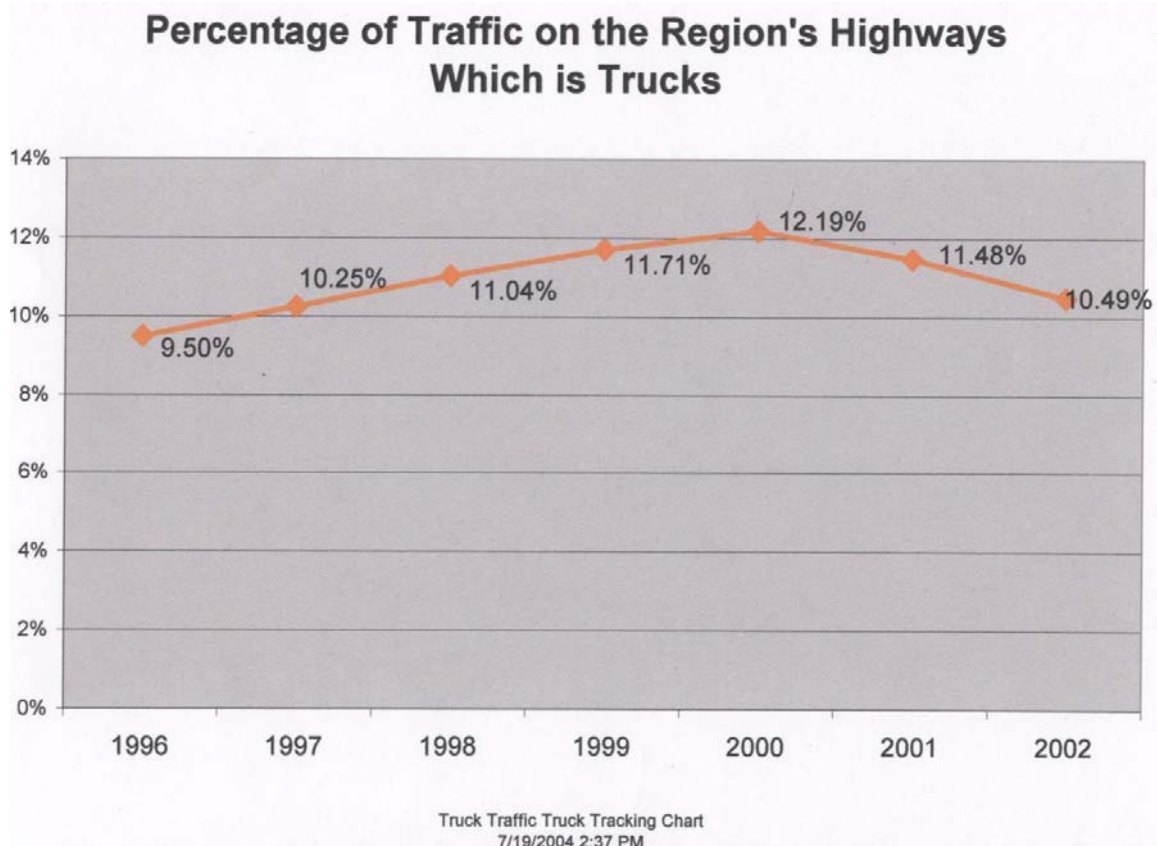


Table 2

Sergeant Jeff Pugh was asked why Arlington would need a commercial motor vehicle inspection unit; he stated no one was doing truck enforcement in the Metroplex cities. The Department of Public Safety enforces CMV regulations in the rural areas outside the metropolitan areas. The Tarrant County Sheriff has a one person License and Weight Unit that works in the unincorporated areas of the county. According to Sergeant Pugh, no agency monitors the thousands of trucks that drive inside the Metroplex other than part time inspectors for the city of Arlington. The City of Dallas had an inspection unit but lost it in a budget cut. The City of Fort Worth was not

interested in truck inspections until recently. (Sergeant Jeff Pugh, personal communication, August 12, 2004.)

The FMSCA Analysis Division, along with the Volpe National Transportation Systems center, “developed an analytical model to measure the effectiveness of roadside inspections.” The chart below dramatizes the benefits of both traffic enforcement and truck inspections. Traffic enforcement is shown to save lives avoid crashes and injuries. The red bars show that truck inspections greatly enhance all of the positive reasons mentioned on table 3.

Federal Motor Carrier Safety Administration 1998 Intervention Chart

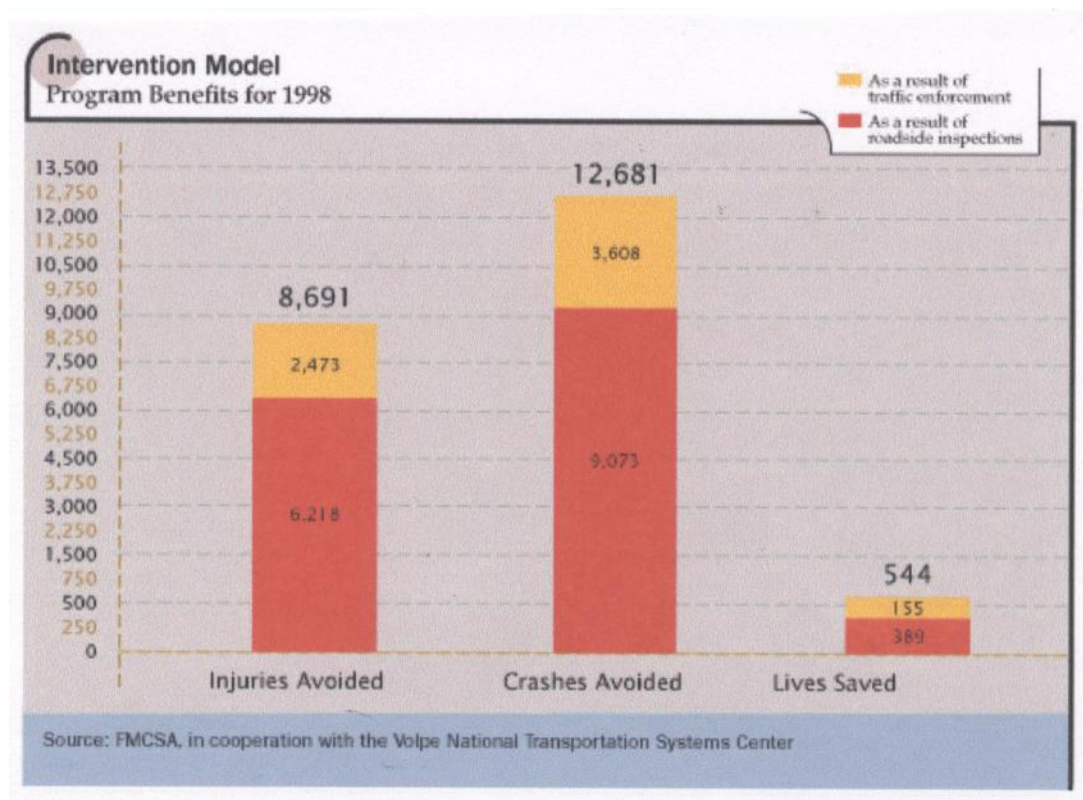


Table 3

This model sought to show the effectiveness of roadside inspections. The information compared was crash avoidance and injuries prevented in relation to commercial motor vehicle inspections. Commercial motor vehicle inspections and traffic enforcement was shown to have prevented approximately 12600 crashes and 8700 injuries.

The Arlington Police Department has a higher incidence of out-of-service vehicles than the statewide average. Corporal Whittington of the Arlington Police Department claims their out of service rate is high because the Department of Public Safety rarely inspects CMVs in the Metroplex. Arlington's inspections have resulted in:

- 1) The majority of out of service results ,from unsecured loads
- 2) Hazardous materials loads are not properly placarded,
- 3) Drivers do not follow in service driving hours especially at night,
- 4) Overweight trucks are suspected of causing infrastructure damage,
- 5) Truck routes are not obeyed,
- 6) Potential Homeland Security issues.

The North Texas Council of Governments monitors North Texas highways with the Texas Department of Transportation. Both agencies predict an increase in all vehicle traffic on North Texas highways. The highways of North Texas are going to become more congested as the area grows. If CMVs are not inspected on a regular basis, then the potential for injury accidents will increase dramatically as demonstrated by Arlington's two recent fatality accidents caused by CMV safety violations and equipment failures.

DISCUSSION/CONCLUSIONS

Should a municipal police department assign personnel to do commercial motor vehicle enforcement on a full time basis? Can the assignment of personnel to this task

be justified? It is clear that Arlington puts twice the state average of trucks out of service. The Arlington police practitioners hear from out of service drivers, on a regular basis, about how they did not anticipate an inspection. Drivers will tell Arlington Police personnel they have never been inspected by the Department of Public Safety as long as they drive within the metroplex.

Arlington has approximately 500,000 vehicles passing through the city on its three major highways, on a daily basis. This does not include Spur 303, FM 187, SH 287 and Route 180. The volume of traffic is predicted to grow in both passenger and truck traffic. Examining the FMCSA model of accident reduction and injury prevention through CMV truck inspection ties in with the North Texas regional increase in traffic as the potential for accidents appears to increase.

Currently the Arlington Police Department has four part time inspectors using 25 percent of their time inspecting trucks. These four accident investigators have generated \$80,000 of fine revenue, in the first six months of this fiscal year. Two full-time inspectors could be expected to produce \$160,000 in citation revenue. This relieves the two “part-time” inspectors to do full-time accident investigation duty. Two full-time inspectors could address all of the inspection needs of the traffic unit. The two former inspectors would not be split in their duties and would become more effective accident investigators.

Sergeant Laurretta Hill supervised the personnel unit of the Arlington Police Department. She estimated that it costs her department \$75,000 a year to field a police officer. This includes benefits and salary (Sergeant Laurretta Hill, personal communication, July 5, 2004).

The need for police departments to establish a CMV inspection unit depend on each cities circumstances. Any department seeking to justify establishing a CMV would need to document why they are suggesting such a unit. They should: examine whether they can enforce FMSCA North American Roadside Safety Regulations by reviewing Texas laws, monitor the volume of commercial motor vehicle traffic on its jurisdictions roadways, document CMV enforcement issues, complaints and accidents, investigate the costs of establishing a CMV inspection unit, and project the potential citation revenue of commercial citations.

A municipal police department can justify a full-time CMV inspection unit both fiscally and publicly. The timing is right to form a unit to monitor the increasing commercial traffic on municipal streets and highways. The need for a commercial motor vehicle inspection unit is growing with the current and predicted traffic passing through the Fort Worth Dallas area on a daily basis.

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